

Pollution Prevention (P2), or source reduction, is the core environmental ethic of our society.

Soy Oil Saves Environment

Bruning Feed and Grain, Bruning, NE, has developed a drip oil from soy beans. This product was originally designed to replace petroleum-based oils in lubricating center pivot irrigation pumps. Because it is biodegradable, the oil is not as harmful to the environment as other oils can be. It is so safe, it can be used in aquaculture to lubricate pumps. The soy drip oil will not clog fish gills the way petroleum oils will. Distributors in Texas and California are finding interest in the product due to groundwater concerns.

Besides agricultural application, the expelled oil can be used as a concrete release agent, allowing set concrete to be removed from forms more easily. The soy oil also is effective in dust control when mixed with water and sprayed onto gravel or dirt driveways. Recently Bruning entered into a contract with Gem Tek of Phoenix, AZ, to develop lubricating oils from soy oil—such as cutting oils and bar oils for chainsaws.

The soy drip oil costs a little more than petroleum-based lubricants. The cost is around \$5 per gallon. However, these costs are often offset by savings in other areas such as reduced disposal and handling costs.

For more information contact Tina Domeier at 1-800-232-6623. You can also visit the company's website at www.bruninggrain.com. To find out more about the Gem Tek project, go to that company's website at www.gemtek.com.

The P2 Corner

Self-Discovery:

A SOLUTION TO SMALL BUSINESS'S WASTE MANAGEMENT WOES

Many small businesses want to do the right thing environmentally. They worry that asking questions can lead to penalties, notices of violation (NOVs), or bad publicity. There are steps that small businesses can take to discover and correct environmental problems without enforcement action.

Nebraska recently passed a bill and the EPA published a policy that allows businesses to make a "self-discovery" or "self-disclosure." According to the EPA, "Under the [self-discovery] Policy, EPA will waive or mitigate civil penalties whenever a small business makes a good faith effort to comply with environmental requirements by discovering violations, promptly disclosing the violations, and correcting them."*

Self-discovery can occur during a technical assistance or compliance assistance site visit. However the visit cannot be in response to a complaint or part of a regular permit inspection. These assistance visits include visits intended to offer pollution prevention technical assistance, to prepare an environmental management system, or other nonregulatory site visit or assessment. In order to obtain the benefits of self-discovery, "the business must promptly disclose the violation to the appropriate regulatory agency and comply with the . . . provisions of this Policy."*

Self-discovery does not guarantee that a small business will *never* suffer an enforcement action. If the environmental violation is severe and poses a significant threat to human health and the environment, action might be taken. In most cases, the small business will have sufficient time to resolve the problem before any penalty will be issued. Further, if the self-discovery comes as

the result of a technical or compliance assistance visit, the person or team conducting the site visit will often be able help. The assistance provided might include solutions or might help the small business find the resources to solve the problem. Sometimes, the assistance provider

can even suggest sources of funding to help the small business pay for certain equipment updates or purchases to solve the problem. The LLCHD offers such assistance.



If you wish to have a confidential, nonregulatory

pollution prevention technical assistance site visit, call the LLCHD at 441-8040. You can obtain more information about self-discovery by calling the LLCHD, 441-8644, or visiting the EPA webpage <http://www.epa.gov/oeca.polguid/oeca5sum.html>. You can also contact Ginger Gottliffe, Office of Compliance, (202) 564-7072; fax (202) 564-0009; e-mail: gottliffe.ginger@epa.gov.

* "Proposed Modifications to the Policy on Compliance Incentives for Small Businesses and Request for Public Comment." EPA. FR Doc. 99-19437. July 28, 1999.



Compliance Audit Agreements

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The EPA recently began an effort to help businesses learn what they need to do to come into compliance with environmental regulations with limited risk of penalty. By entering into a compliance audit agreement, "companies [can] audit themselves and receive reduced civil penalties, which can be completely eliminated" in some situations.

"The agreements demonstrate a company's commitment to environmental compliance." Naturally, a company must correct any violations or problems discovered during the audit within a specified deadline. "The policy does not cover certain violations, such as those that reflect criminal conduct or result in actual significant harm to public health or the environment."

For more information, contact Geraldine Gardner (202) 564-4032 or Tony Ellis (202) 564-4167, EPA, Office of Regulatory Enforcement, Toxics and Pesticides Enforcement Division.

TIPS.

Many pollution prevention (P2) or waste reduction efforts involve replacing a hazardous or toxic material with a less hazardous or toxic one. The goal is to use the *least* dangerous material that still does the job.

A domestic example of material substitution is to replace a toxic drain cleaner. Many commercial drain cleaners carry severe warnings on their labels. They contain acids and poisonous or reactive ingredients. You often must use them in well-ventilated areas. An alternative drain cleaner can be made using boiling water and vinegar. The choice is simple: use something that contains acid and is highly corrosive to metal pipes or use something that could be used to make salad dressing. The less hazardous choice is also cheaper in this situation.

In business, choices might not be so clear-cut. Some machines only work or work most effectively with certain materials. Nonetheless, with a little research and thought, most businesses can find less costly, less hazardous substitute materials that are as effective as the materials they currently use. Many print shops, for example, now use soy or powdered inks. These inks are less harmful to workers and are better for the environment.

Some Alternatives

An alternative to solvent cleaning in metal finishing operations is aqueous cleaning. This process uses a water, detergent, and either alkaline or acid chemicals. There are different types of cleaning formulas and methods.

Material Substitutions



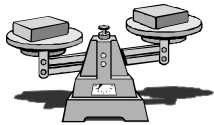
Many painting and coating businesses have recently moved to powder coating in their application processes. Powdered coating uses an electrostatic process to meld the coating medium to the surface. Heat is applied to bond the powder coating medium to form a solid surface that is as good as traditional spray paints.

Powder coating materials often cost more per gallon than conventional coatings. However, being more concentrated, powdered coatings cover more surface area. Therefore, a smaller amount of powder coating will cover the same surface area as a larger amount of conventional coating medium. There are fewer disposal problems and costs. In the long run, the powder coating is more cost-effective.

When deciding on material substitution alternatives for surface coating, a business needs to be aware of the volatile organic content (VOC) and the hazardous air pollutant (HAP) content of the medium. The goal is to reduce VOCs, HAPs, and solid HAPs. Some media will have lower VOC but high HAP. Be sure to discuss these issues with your vendor. Carefully read, and be sure you understand, the Material Safety Data Sheet (MSDS) that comes with the material you purchase.

As technology improves, alternatives become more effective and less costly. Before ruling out material substitutions, look into alternatives. You might be pleasantly surprised by the benefit to the bottom line.

For more information, contact the LLCHD, 441-8040.



THRESHOLD PROBLEMS

It is not always the purchase and use of a material that causes compliance problems for a small business. A frequent problem is the storage of waste or out of date product prior to disposal. For example, a small business might generate 3 pounds per month of filters from painting operations. This owner might decide that it would be more cost effective to collect the waste for several months before disposing of the material.

If the owner collected the waste and disposed of 42 pounds or more in a given month, that owner would need to obtain a Special Waste Disposal Permit from the Lincoln-Lancaster County Health Department and pay an annual permit fee of \$200. This limit is called a "threshold." The business would benefit by disposing of the waste more frequently.

A business can legally keep unlimited quantities of *usable* product in storage. When the business disposes of *more* waste than threshold limits, the business must obtain the correct permits and may have to pay additional costs.

For more information call the LLCHD Special Waste Program at 441-6238 or 441-6235.

<http://www.ci.lincoln.ne.us/city/health/envIRON/pollu/>

The Ethic is published quarterly by the Lincoln-Lancaster County Health Department and is distributed to Special Waste Permit holders and other businesses in Lincoln and Lancaster County.

For more information or for P2 technical assistance, call 441-8040.

RETURN SERVICE REQUESTED

Lincoln, NE 68510-1514
3140 "N" Street
Lincoln-Lancaster County Health Department

